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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/275,514	03/24/1999	MATTHEW J. HOLLIMAN	42390.P7034	9862

8791 7590 03/13/2006

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EXAMINER

VIG, NARESH

ART UNIT	PAPER NUMBER
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3629

DATE MAILED: 03/13/2006

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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 09/275,514
Filing Date: March 24, 1999
Appellant(s): HOLLIMAN ET AL.

Justin B. Scout (Reg. No. 54,431)
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 12 December 2005 appealing from
the Office action mailed 06 April 2005

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is incorrect. A correct statement of the status of the claims is as follows:

Claims 1-32 are now pending in the above referenced patent application. Claims 1-32 were rejected in the Non Final Action mailed 05 April 2005 and are subject of this appeal.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

Lewis et al. US Patent 6,385,388

Hsu US Patent 6,195,692

Information on DirecTV

an article by Gary D. Robson, "Ratings, Filters, and Censorship"

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Regarding claim 1, Lewis teaches:

selecting a set of segments of content from a group of segments to be protected wherein the set does not include all segments of the group [Fig. 8a].

protecting the segments of the set, but not the other segments of the group, to prevent the protected segments from being properly reproduced unless the protection is undone with assistance of a correct key (i.e. password) that is not generally available

and is based at least in part on the associated identifier (it is a design choice to select the password requirements to secure the system from Hacking) [Fig. 11].

Lewis does not teach system and method of providing content to a receiving device having an associated identifier associated with a network address for the receiving device (internet on-demand system). However, Hsu teaches system and method of providing content to a receiving device having an associated identifier associated with a network address (e.g. host name or web address which is associated with a network address like ip address) for the receiving device (i. e. internet on-demand system). Hsu teaches providing access to the group of segments over a network.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Lewis as taught by Hsu provide digital content to users over the network to have implement a video-on-demand (VOD) services.

Lewis in view of Hsu does not teach protected segments from being properly reproduced unless the protection is undone with assistance of a correct key that is not generally available and is based at least in part on the associated identifier. However, DirecTV teaches system and method for protected segments from being properly reproduced unless the protection is undone with assistance of a correct key that is not generally available and is based at least in part on the associated identifier (users can view information provided by DirecTV after the user activates the access card received from DirecTV [DirecTV page 15]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Lewis in view of Hsu as taught by DirecTV to control the access of the content by registered access box.

Regarding claim 3 Lewis teaches:

selecting a set of segments of content from a group of segments to be protected (it is a design choice to elect that a sub-set cannot include the complete set).

protecting the segments of the set, but not the other segments of the group to prevent the protected segments from being properly reproduced;

selecting the set involves selecting at least some of the set for visual scrambling and protecting the set includes visual scrambling those segments selected for visual scrambling

Lewis does not teach system and method providing access to the group of segments over a network (internet on-demand system). However, Hsu teaches system and method of providing content to a receiving device having an associated identifier associated with a network address (e.g. host name or web address which is associated with a network address like ip address) for the receiving device (i. e. internet on-demand system). Hsu teaches providing access to the group of segments over a network.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Lewis as taught by Hsu provide digital content to users over the network to have implement a video-on-demand (VOD) services.

Lewis in view of Hsu does not teach protected segments from being properly reproduced unless the protection is undone with assistance of a correct key that is not generally available and is based at least in part on the associated identifier. However, DirecTV teaches system and method for protected segments from being properly reproduced unless the protection is undone with assistance of a correct key that is not generally available and is based at least in part on the associated identifier (users can view information provided by DirecTV after the user activates the access card received from DirecTV [DirecTV page 15]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Lewis in view of Hsu as taught by DirecTV to control the access of the content by registered access box.

Lewis in view of Hsu and DirecTV teaches visual scrambling involves using a key, including a remote computer number (what contents to use to generate a key is a design choice).

Regarding claim 12, Lewis teaches:

undoing the protection if the correct key (password) is received [Fig. 12];

playing the group of segments seamlessly with a media player [Fig. 12];

Lewis does not teach accessing over a network a group of segments of content including a set of segments that does not include all segments of the group, and wherein the set, but not the other segments of the group, have been protected to prevent the protected segments from being properly reproduced without undoing the

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protection with assistance of a correct key that is not generally available and is based at least in part on the associated identifier (digital information which is protected and can be reproduced with proper unlocking mechanism). However, Lewis teaches digital information can be unlocked for access with the unlocking mechanism (e.g. password). Hsu teaches system and method of providing digital information over a network.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Lewis as taught by Hsu provide digital content to users over the network to have implement a video-on-demand (VOD) services.

Lewis in view of Hsu does not teach protected segments from being properly reproduced unless the protection is undone with assistance of a correct key that is not generally available and is based at least in part on the associated identifier. However, DirecTV teaches system and method for protected segments from being properly reproduced unless the protection is undone with assistance of a correct key that is not generally available and is based at least in part on the associated identifier (users can view information provided by DirecTV after the user activates the access card received from DirecTV [DirecTV page 15]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Lewis in view of Hsu as taught by DirecTV to control the access of the content by registered access box.

Regarding claim 19, Lewis teaches:

storage to hold at least content divided into segments (DVD);

a user interface (gets password from user) [Fig. 12]; and
circuitry and software cooperating with the user interface to select a set of the segments to be protected from a group of segments, wherein the set does not include all segments of the group, and to protect the set of segments, but not the other segments of the group [col. 1, lines 46 – 54], prevent the protected segments from being properly reproduced unless the protection is undone with assistance of a correct key that is not generally available, wherein the correct key is based at least in part on the associated identifier [Fig. 12].

Lewis does not teach access of content over a network, an identifier associated with a network address for a receiving device. However, Hsu teaches system and method of providing content to a receiving device having an associated identifier associated with a network address (e.g. host name or web address which is associated with a network address like ip address) for the receiving device (i. e. internet on-demand system). Hsu teaches providing access to the group of segments over a network.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Lewis as taught by Hsu provide digital content to users over the network to have implement a video-on-demand (VOD) services.

Lewis in view of Hsu does not teach protected segments from being properly reproduced unless the protection is undone with assistance of a correct key that is not generally available and is based at least in part on the associated identifier. However, DirecTV teaches system and method for protected segments from being properly reproduced unless the protection is undone with assistance of a correct key that is not

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generally available and is based at least in part on the associated identifier (users can view information provided by DirecTV after the user activates the access card received from DirecTV [DirecTV page 15]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Lewis in view of Hsu as taught by DirecTV to control the access of the content by registered access box.

Regarding claim 26, Lewis teaches:

a machine readable media including instructions that when executed cause a content providing system to select a set of segments of content from a group of segments to be protected wherein the set does not include all segments of the group (Lewis teaches data information can be segmented for providing protected access information) [Fig. 8b, Fig. 1];

protect the segments of the set with, but not the other segments of the group, to prevent the protected segments from being properly reproduced unless the protection is undone with assistance of a correct key that is not generally available, wherein the correct key is based at least in part on an identifier [Fig. 8b, Fig. 12].

Lewis does not teach to provide access to the group of segments over a network, and a network address for a receiving device. However, Hsu teaches system and method of providing content to a receiving device having an associated identifier associated with a network address (e.g. host name or web address which is associated

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with a network address like ip address) for the receiving device (i. e. internet on-demand system). Hsu teaches providing access to the group of segments over a network.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Lewis as taught by Hsu to create and provide digital content to users over the network to have implement a video-on-demand (VOD) services.

Lewis in view of Hsu does not teach protected segments from being properly reproduced unless the protection is undone with assistance of a correct key that is not generally available and is based at least in part on the associated identifier. However, DirecTV teaches system and method for protected segments from being properly reproduced unless the protection is undone with assistance of a correct key that is not generally available and is based at least in part on the associated identifier (users can view information provided by DirecTV after the user activates the access card received from DirecTV [DirecTV page 15]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Lewis in view of Hsu as taught by DirecTV to control the access of the content by registered access box.

Regarding claim 28, Lewis teaches:

a machine readable media including instructions that when executed cause a content providing system to access a group of segments of content including a set of segments that does not include all segments of the group [Fig. 8b], and wherein the set,

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but not the other segments of the group, have been protected to prevent the protected segments from being properly reproduced without undoing the protection with assistance of a correct key that is not generally available, wherein the correct key is based at least-in-part on an identifier associated with a network address (user preference to decide on the value of key) for a receiving device for the content [Fig. 8b, Fig. 11];

undo the protection if the correct key is received [Fig. 8b];

play the group of segments seamlessly with a media player [Fig. 12].

Lewis does not teach access over a network . However Hsu teaches to provide access of digital information over a network.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Lewis as taught by Hsu to create and provide digital content to users over the network to have implement a video-on-demand (VOD) services.

Lewis in view of Hsu does not teach protected segments from being properly reproduced unless the protection is undone with assistance of a correct key that is not generally available and is based at least in part on the associated identifier. However, DirecTV teaches system and method for protected segments from being properly reproduced unless the protection is undone with assistance of a correct key that is not generally available and is based at least in part on the associated identifier (users can view information provided by DirecTV after the user activates the access card received from DirecTV [DirecTV page 15].

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Lewis in view of Hsu as taught by DirecTV to control the access of the content by registered access box.

Lewis in view of Hsu does not teach protected segments from being properly reproduced unless the protection is undone with assistance of a correct key that is not generally available and is based at least in part on the associated identifier. However, DirecTV teaches system and method for protected segments from being properly reproduced unless the protection is undone with assistance of a correct key that is not generally available and is based at least in part on the associated identifier (users can view information provided by DirecTV after the user activates the access card received from DirecTV [DirecTV page 15]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Lewis in view of Hsu as taught by DirecTV to control the access of the content by registered access box.

Regarding claim 30, Lewis teaches providing content to at least one receiving device. Lewis teaches;

selecting a set of segments of content from a group of segments to be protected wherein the set does not include all segments of the group [Fig. 8b];

protecting the segments of the set, but not the other segments, through visual scrambling determined based at least in part on the associated identifier [Fig. 8b, Fig. 12]; and

Lewis does not teach providing access to the group of segments (digital information) over a network, and having an associated identifier associated with a network address for a receiving device. However, Hsu teaches to provide access to digital information over a computer network. However, Hsu teaches system and method of providing content to a receiving device having an associated identifier associated with a network address (e.g. host name or web address which is associated with a network address like ip address) for the receiving device (i. e. internet on-demand system). Hsu teaches providing access to the group of segments over a network.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Lewis as taught by Hsu provide digital content to users over the network to have implement a video-on-demand (VOD) services.

Regarding claims 2 and 13, Lewis teaches to descrambling the scrambled data. Official notice it taken that it would have been obvious to one of ordinary skill in the art at the time the invention was made that it is a business choice to select what part of data stream need to be scrambled to prevent unintended use of the data.

Therefore, it would have been obvious one of ordinary skill in the art at the time the invention was made that data Lewis teaches selecting the set involves selecting at least some of the set for visual scrambling and protecting the set includes visual scrambling those segments selected for visual scrambling to minimize revenue loss due unauthorized use of program content, provide parental-control of the information for the users etc.

Regarding claim 5, Lewis teaches selecting the set involves designating those segments to be protected [Fig. 8].

Regarding claims 6, 14, 21, 22, Lewis does not teach selecting the set involves selecting at least some of the set for bit encryption and protecting the set includes bit encrypting those segments selected for bit encryption. However, Lewis teaches selecting at least some of the set for protection, and, digital information can be encrypted [col. 4, line 4].

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made that Lewis teaches that digital information can be encrypted to prevent unauthorized access.

Regarding claim 9, Lewis teaches prior to protection, the segments include video signals.

Regarding claim 10, Lewis does not teaches video signals are in an MPEG format. However, Hsu teaches video signals are in MPEG format.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Lewis as taught by Hsu to digitize the video signal for access over a data network.

Regarding claim 11, Lewis teaches protection of both the video and audio [col. 1, line 9].

Regarding claim 16, Lewis teaches identifying protected segments is contained in headers [col. 1, lines 46 – 54].

Regarding claim 24, Lewis teaches content includes video signals.

Regarding claim 25, Lewis teaches content includes video signals and audio signals [col. 1, line 9].

Regarding claim 31, Lewis does not teach receiving device comprises a network information browser configured to display the provided content. However, Hsu teaches network information browser configured to display the provided content provided over the internet [col. 2, lines 38 – 41].

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Lewis as taught by Hsu and display provided content over a browser to allow user to view the digital content over a computer system.

Regarding claims 4, 15, 20, 27, 29, 32, Lewis in view of Hsu does not teach remote computer number is a processor number (i.e. hard coded number for a device).

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However, DirecTV teaches that its access card contains a microprocessor [page 19].

Lewis in view Hsu and DirecTV does not teach the device number same as processor number. Official notice it taken that it would have been obvious to one of ordinary skill in the art at the time the invention was made that it is a business choice to decide how they would want to assign serial numbers to their products. A business may elect to program their own identifiers (e.g. serial numbers), or, may elect to use some other means like serial number of the motherboard etc.

Therefore, a business may elect to use the processor manufacturer's serial numbers assigned to the processor as their identification number to ensure that the identification number assigned the device is a unique number.

Regarding claims 7, 23, Lewis in view of Hsu does not teach selecting the set involves selecting at least some of the set for visual scrambling and at least some of the set for bit encryption, wherein some of the set may be selected for both visual scrambling and bit encryption, and protecting the set includes visual scrambling those segments selected for visual scrambling and bit encrypting those segments selected for bit encryption. However, Lewis teaches selection of set for protection and encryption of digital information (responded to earlier in response to claims 5 and 6). Official notice it taken that it would have been obvious to one of ordinary skill in the art at the time the invention was made that it is a business choice to select what security measures to implement to prevent digital information from unauthorized use. DirecTV teaches to

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provide security and encryption information allowing customers to control the use of DSS and enabling DirecTV to capture billing information [page 19].

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made that Lewis teaches selection of subsets and modify Lewis in view of Hsu as taught by DirecTV for encryption of digital information to prevent the unauthorized access of the digital information.

Regarding claim 8, Lewis in view of Hsu does not teach remote computer number is stored and matched against a remote computer number from a remote receiving computer during playback (hard coded authentication mechanism). However, Lewis teaches to use passwords for authentication [Fig. 10]. DirecTV discloses to authenticate users. DirecTV discloses to restrict access to content by providing an access card, which acts as a "license plate" to provide security and encryption information allowing customers to control the use of DSS and enabling DirecTV to capture billing information [page 19]. DirecTV discloses to associate users with access card [page 15]. Official notice it taken that it would have been obvious to one of ordinary skill in the art at the time the invention was made that DirecTV authenticates access cards to enable customers to view program contents.

Therefore, it would have been obvious to a person with ordinary skill in the art to modify Lewis in view of Hsu as taught by DirecTV and use hard coded authentication mechanism to limit the access to digital information at the designated playback equipment.

Claims 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lewis et al. US patent 6,385,388 hereinafter known as Lewis in view of Hsu US Patent 6,195,692 and further in view of DirecTV, Inc. hereinafter known as DirecTV, an article Ratings, Filters, and Censorship by Gary D. Robson hereinafter known as Robson.

Regarding claim 17, Lewis in view of Hsu does not teach identifying protected segments is contained in at least one watermark. Appellant recites "Invisible watermarking techniques are methods for inserting information into media data without creating visible distortion". Robson teaches V-chip information is carried in previously-unused area of closed-captioning signal (digital information control information is transmitted in a separate channel without visibly distorting the information, i.e. water marking).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Lewis in view of Hsu as taught by Robson to control the access of digital information. For example, converting R Rated movie to a PG rated movie as taught by Robson.

Regarding claim 18, Lewis in view of Hsu does not teach identifying protected segments is contained in data transmitted separately from the segments. However, Robson teaches protected segments is contained in data transmitted separately from the segments (unused area of closed-captioning).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Lewis in view of Hsu as taught by Robson to control the access of digital information. For example, converting R Rated movie to a PG rated movie as taught by Robson.

(10) Response to Argument

Counselor and the appellant have their opinion, however, examiner has different opinion. In the arguments, appellant is arguing encoding segments using a key specific to receiving device, however, appellant is arguing a limitation not positively claimed by the applicant. Appellant positively claims protection undone at the receiving device with assistance of a correct key, but, appellant does not positively claim that the protection is done using a correct key associated with the receiving device.

In response to appellant's inquiry about Official Notice within the detailed explanation of the rejection, Office Notice were withdrawn in the detailed explanation of the rejection.

In response to appellant's argument that it would not have been obvious to one of ordinary skill in the art what part of data stream need to be scrambled to prevent untended use of the data.

However, appellant is arguing a limitation not claimed by the appellant. Appellant claims protecting segments of the set, but does not claim scrambling the segment of the set. Protecting is to secure or preserve against encroachment, infringement, restriction, or violation, whereas, scrambling is to distort or garble (a signal) so as to render it unintelligible without a special receiver.

In response to appellant's argument that neither of the cited references Lewis, Hsu, nor DirecTV, either alone or in combination, suggests or describes decrypting the segments utilizing a correct key that is based at least in part on the associated identifier with a network address for the receiving device.

However, appellant is arguing a limitation not positively claimed by the appellant. Appellant has not claimed that the network address is part of the key, but, and identifier which is associated with a network address. It is known to one of ordinary skill in the art at the time the invention was made that in a wide area networking, network address (can be NIC address or user defined address as used in IBM Token Ring network architecture) which is associated with a workstation (receiving device) is used to ensure that the transmitted data is delivered to the intended workstation (receiving device).

In response to appellant's argument that It is unlikely that DirecTV encodes their broadcast in such a way that there is a key associated with either a network address or an identifier on each card.

However, Appellant is arguing a limitation which is not positively claimed by the appellant. Appellant positively claims protection undone at the receiving device with assistance of a correct key, but, appellant does not positively claim that the protection is done using a correct key associated with the receiving device.

In response to appellant's argument that DirecTV issues a single broadcast to all or half the United States (Appellants are unsure if DirecTV has both an East and a West Coast satellite). These satellites have a limited bandwidth with which to transmit the TV broadcasts. If the PTO's guess as to how DirecTV worked was correct, each receiver would have an individual network address (supposedly embedded within the access card). Each receiver would receive a broadcast specially encrypted with that receiver's unique key (which is required to be based upon the receiver's network address).

However, appellant is arguing a limitation which is not positively claimed by the appellant. Appellant does not positively claim that the protection is done using a correct key associated with the receiving device.

In response to appellant's argument that DirecTV teaches access card, not correct key that is generally not available and is based at least in part on the associated identifier.

However, appellant is arguing a limitation which is not positively claimed by the appellant. Appellant does not claim that the each receiving device will have its own specific key which will be unique in the network.

In response to appellant's argument that DirecTV teaches access card, which requires activation prior to decrypting. DirecTV does not teach a correct key that is based at least in part on the associated identifier with a network address.

However, appellant is arguing a limitation which is not positively claimed by the appellant. Appellant does not positively claim that network address of each receiving device is used in the associated identifier.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,



Naresh Vig
Examiner
Art Unit 3629

Conferees:

John Weiss



Dennis Ruhl

